

IN THE SPECIFICATION

Please replace the Abstract at page 26, lines 1-18, with the following rewritten  
Abstract on a separate sheet as follows:

## ABSTRACT

A plasma processing apparatus includes a chamber, a dielectric top plate member disposed on an upper portion of the chamber and an antenna having a plurality of slots. The antenna is disposed on the top plate member and is in close contact with the top plate member. The top plate member includes a flat plate portion formed to face the substrate and a sidewall portion formed to extend from a peripheral region of the flat plate portion towards the substrate. The sides of the flat plate portion and the sidewall portion facing a plasma generation region have a curved surface extending between the flat plate portion and the sidewall portion and the sidewall portion has a thickness not smaller than  $\lambda_g/4$  but not greater than  $\lambda_g$ ,  $\lambda_g$  being a wavelength of the microwave.